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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,090	03/21/2001	Takuji Uneyama	0033-0697P	1387

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EXAMINER

PAN, DANIEL H

ART UNIT	PAPER NUMBER
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2183

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,090

Applicant(s)

UNEYAMA ET AL.

Examiner

Daniel Pan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/21/01</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Clams 1-10 are presented for examination.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2 are rejected under 35 U.S.C. 102(a) and (b) as being anticipated by Thacker (5,267,235) .

3. As to claim 1, no specific language of the "self-synchronous" in the preamble has been reflected into the claim body, therefore, it is not given a patentable weight. Thacker taught a system (see fig.2) including at least :

a) transfer control circuit [Bo] transferring a first pulse [input link request] applied from a preceding stage (see the input links) to a subsequent stage (see the output of circuit 30) as a second pulse (see output request) based on an instruction signal instruction (not explicitly shown) enabling or disabling of the transfer (see col.5, lines 24-63, see also the request vectors in col.6, lines 10-55 for details);

b) a pulse control circuit [24] receiving data transfer request pulse signal as the first pulse from the transfer control circuit [30] in the preceding

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stage to output a plurality of data transfer request pulse signals (see the request grant signals, see also col.8, lines 26-64).

Wherein the transfer control circuit in the preceding stage (the current transfer cycle) and the subsequent stage (the subsequent transfer) are similarly configured (see the data transfer with iterative request match in col.8, lines 26-64, col.12, lines 12-46, for the detailed functions of the arbitration unit 24).

4. As to claim 2, Thacker also selected number of data transferred (see the N queue buffer for storing data).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuboi et al. (5,140,582) in view of Yamasaki et al. (5,539,916).

6. As to claim 5, Tsuboi disclosed a synchronization circuit including at least :

a) data transmission path for holding a data packet (see the successive packets written into buffer 31 in col.23, lines 40-53);

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b) data numbering detecting means[counter 38] for detecting the number of data based on output packet information field in the data transmission path (see fig.17, 31, see col.23, lines 40-53, see also col.24, lines 6-16 for the frame number);

the transfer control circuit [33] outputting a transfer pulse request [transfer request frame] corresponding to the number of data, in response to the detection of the number of data (e.g. see the generation of the transfer request which included the packet frame number in col.24, lines 28-43).

7. Tsuboi did not specifically show his data transmission path for holding data packet was based on a pulse as claimed. However, Yamasaki disclosed a system including a pulse signal (see the BRQ pulse in fig.1). It would have been obvious to one of ordinary skill in the art to use Yamasaki in Tsuboi for holding data packet based the pulse signal as claimed because the use of Yamasaki could provide Tsuboi the control ability to accept the data input packet at a predetermined type of transfer access signal such as the generated single pulse or multivariate pulses, and it could be readily achieved by predefining the pulse signal of Yamasaki into Tsuboi with modified control parameters, such as the signal width, and type, so that the pulse signal of Yamasaki could be recognized by Tsuboi in order to achieve the enhanced transfer control ability, and for the above reasons, provided motivation.

As to claim 9, Yamasaki's pulse was not a clock (see fig.1 BRQ).

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As to claim 10, Tsuboi also directed to copying process (see col.23, lines 65-68, col.24, lines 5).

8. Claims 3,4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art of record teaches the further and combined features of the detailed functional connections of the first logic , second logic, storage , gate and the transfer circuits as claimed.

9. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art of record teaches further features of the copying instruction in the instruction field included in the data packet.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Everaarts (4,214,206) is cited for the background teaching of self-synchronous pulse signals (see col.3, lines 28-39).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 703 305

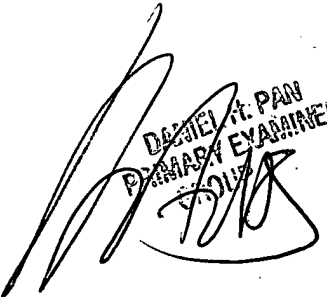
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9696, or the new number 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 703 305 9712, or the new number 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan


DANIEL H. PAN
PRIMARY EXAMINER
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